

THE 'TYPES' OF *MANIOLA JURTINA SPLENDIDA*
WHITE (LEPIDOPTERA: SATYRIDAE)

By GEORGE THOMSON*

Between the years 1871 and 1872 Dr. Francis Buchanan White wrote and published his fine work *Insecta Scotica* in serial form in the *Scottish Naturalist*. Although his travels took him to many parts of Britain and Europe collecting and studying Macro- and Microlepidoptera, Coleoptera, Hemiptera as well as other invertebrates and plants, he never neglected his native Scotland or Perthshire the county town of which was his home for most of his life. His superb collection survives almost intact apart from some specimens of Macrolepidoptera which have mysteriously disappeared, some important Coleoptera which were transferred to the British Museum (Natural History) and his Hemiptera which are said to have been loaned to a museum in the United States in the 1920s and which have never been returned.

FIG. 1

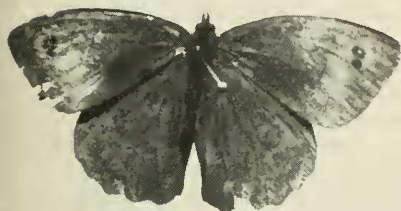


FIG. 2



FIG. 3



FIG. 4



Maniola jurtina splendida White. Figs. 1 and 2, male syntype upper side and underside respectively. Figs. 3 and 4, female syntype upper side and underside respectively. All natural size.

The Rhopalocera section of *Insecta Scotica* lists some thirty-six species occurring in the country, although this number includes unconfirmed species such as *Pyronia tithonus* (Linnaeus), *Argynnis adippe* (Denis and Schiffermuller) and *Hamearis lucina* (Linnaeus). He discounts *Erebia ligea* (Linnaeus) and does not include *Cartero-*

*Department of Biology, University of Stirling, Stirling, FK9 4LA.

cephalus palaemon (Pallas) which was not found in Scotland until more than thirty years after his death. The only mention of a 'new' butterfly in this section of his work is the form of *Maniola jurtina* (Linnaeus) called *splendida* which he describes thus:

"Var. (and ab.) *splendida*. — Larger and brighter coloured; the apical spot of the front wing with two white dots." And he continues: "Found by Mr. A. Davidson in the island of Longa, on the west coast of Ross-shire. Mr. Davidson informs me that it is very plentiful in the island, and that it is the only form occurring there. Occasionally in Aberdeenshire (J. W. H. Traill). I have taken this variety in the island of Capri near Naples." Note that the locality is Longa Island, Ross-shire — not Lunga, Argyllshire as stated in Higgins and Riley (1970, 1973, 1975, 1980).

Buchanan White did not designate types as such, but it would be expected that he would have retained examples of this race in his collection. P. P. Graves (1930) in his redescription of *splendida* said that he had searched for the Buchanan White 'types' in the Perth Collection without success: "Buchanan White's types could not be found in the Perth County Museum. . ."

No further search for *splendida* was made until the White collection was examined for the purposes of the author's work on *Maniola* (Thomson, 1969, 1970). My quest was no more successful than that of Graves some thirty-nine years earlier, although there were specimens of the Capri form to which White referred in his description. There the matter would have rested had it not been for an accidental discovery. While studying the collection of Lepidoptera for a quite different purpose (Thomson, 1980), I noticed that the contents of box number 15 comprised an odd mixture of families including Noctuidae, Geometridae, Arctiidae, Saturniidae, Lycaenidae, Pieridae, Nymphalidae and also a number of Microlepidoptera. The most interesting specimens were those in the last row, three *jurtina*, a set male and female and a pinned but unset female, all being of the form found in the north-west of Scotland which we know as *splendida*. The three *jurtina* were unlabelled. Nor had they numbers referring to entries in one of the cabinet books in which White kept note of specimen data. Two volumes of his notes survive, although the first 200 entries in the first book have been lost. It is unlikely that these specimens were added to the collection by someone else at a later date. The insect collections in the Perth Museum, until very recently, have been carefully segregated and kept as individual collections rather than being absorbed in a single large collection. There was a separate 'Perthshire Collection' and some use of individual specimens has been made from time to time for display purposes. It is more probable that the odd assortment of lepidopterous insects in case 15 represents material given to White. All of his main collection was of his own making, supplemented by purchased specimens of rarer European species. The comment in his description, "found by Mr. Davidson in Longa", would suggest that the three *jurtina* were given to him by Davidson and the two set specimens are those on which he based his description.

The 'types' themselves are worth close examination as they contrast greatly with Graves' topotypes illustrated in his plate, particularly in the female underside. Graves' material had a rather uniform underside to the forewings in the females with a somewhat pale underside to the hindwings on which the fulvous streak between the discal and postdiscal areas (Hubner's line) stands out clearly. It has already been suggested that his series was atypical of the north-western race in this respect (Thomson, 1970). On the other hand, the Buchanan White pair is representative of the widespread *splendida* form, having an extremely well marked medial line between the basal and postdiscal areas of the female underside forewing. Furthermore, this form has a rather dark underside hindwing which tends to obscure the fulvous Hubner's line. In all other respects both the male and the female are similar to Graves' specimens having large bipupilled apical eyespots and the extensive fulvous markings in both sexes.

The specimens in the Buchanan White collection have been designated as types and labelled thus:

(a) subspecies *splendida* White. Syntype male (figs. 1 and 2). North-west Scotland, probably Longa Island, Ross-shire: A. Davidson.

(b) subspecies *splendida* White. Syntype female (figs. 3 and 4). North-west Scotland, probably Longa Island, Ross-shire: A. Davidson.

The third (unset) specimen found beside the abovementioned types has been labelled:

(c) subspecies *splendida* White. Syntype female. North-west Scotland, probably Longa Island, Ross-shire: A. Davidson.

All specimens remain in the Perth Museum.

Acknowledgements

My sincere thanks go to Mr. James Blair, Curator of the Perth Museum and Art Gallery and Mr. Michael Taylor, Keeper of Natural History, for their generous help while I was working in the museum and for allowing me access to the Buchanan White collections.

References

- Graves, P. P., 1930. The British and Irish *Maniola jurtina* L. (Lep. Satyridae). *Entomologist* **63**: 49-52, plate 1.
- Higgins, L. G. and Riley, N. D., 1970. *A Field Guide to the Butterflies of Britain and Europe*, Collins.
- | | | |
|--|--------------------|-------------|
| | 1973 | 2nd edition |
| | 1975 | 3rd edition |
| | 1980 | 4th edition |
| | revised and reset. | |
- Thomson, G., 1969. *Maniola (Epinephele) jurtina* L. (Lep. Satyridae) and its forms. *Entomologist's Rec. J. Var.* **81**: 7-14, 51-58, 83-90, 116-117.
- , 1970. On the nature of *Maniola jurtina splendida* B. White (Lep. Satyridae). *Entomologist's Rec. J. Var.* **82**: 261-268.
- , 1980. *The Butterflies of Scotland: a Natural History*. Croom Helm, London.
- White, F. B. W., 1872. *Insecta Scotica. Scott. Nat.* **1871-72**: 162-168, 198-202, 238-241, 273-275.